

**AIPG Michigan Section
11th Annual
Environmental Risk Management Workshop
Best Practices for Groundwater Remediation and Management**

TUESDAY - JUNE 14, 2022

7:30 AM	Workshop Registration		
9:30 AM	<i>Opening Remarks & Keynote Speaker Introduction</i>		
9:45 AM	<i>Keynote - Dr. Glenn O'Neil - Michigan State University Institute of Water Research - Economic Impact of Institutional Controls</i>		
10:30 AM	<i>Panel Discussion – Groundwater Policy</i>		
11:30 AM	<i>Michigan & Superior Level Sponsor Introductions</i>		
12:00 PM	Lunch - Sponsored by		
BREAKOUT SESSIONS			
	Session A Remediation	Session B Groundwater Modeling	SHORT COURSE
1:00 PM	<i>Leachable PFAS Soil Treatment for Onsite Remedial Management Karl Yost - YB Technologies Fernanda Wilson, PhD - Fishbeck</i>	<i>Groundwater fate and transport modeling with detailed stratigraphic interpretations JP Brandenburg - Haley Aldrich</i>	<i>Short Course: 1:00 - 3:00 pm Vapor Mitigation System Design Using Hydrogeological Tools Bryan VanDuinen - Geosyntec Paul Nichols - Geosyntec</i>
1:40 PM	<i>A Smoldering Solution to PFAS Destruction Mary Enschede, PhD - Geosyntec</i>	<i>Regional Groundwater Management using Groundwater Flow Models Evan Christianson - BARR Engineering</i>	<i>Short Course: Vapor Mitigation System Design Using Hydrogeological Tools Bryan VanDuinen - Geosyntec Paul Nicholson - Geosyntec</i>
2:20 PM	Networking Break - Sponsored by		
3:10 PM	<i>Enhanced Removal of Poly- and Perfluorinated Alkyl Substances (PFAS) using Photo-Regenerable Carbonaceous Absorbent Man Zhang, PhD, PE and Brian Lowes, PE - CTI & Associates, Inc.</i>	<i>A Robust Approach to Geochemical Analysis and Modeling of Inorganic Contaminants in Groundwater Brian Ares - Geosyntec</i>	<i>Short Course: Vapor Mitigation System Design Using Hydrogeological Tools Bryan VanDuinen - Geosyntec Paul Nichols - Geosyntec</i>
3:50 PM	<i>Bioremediation of PFAS Larry Kinsman - ORIN Technologies</i>	<i>An Automated Workflow for Creating Geologic, Hydraulic Conductivity, & Groundwater Contamination Models Jim Reed - RockWare Inc</i>	<i>Short Course: Vapor Mitigation System Design Using Hydrogeological Tools Bryan VanDuinen - Geosyntec Paul Nichols - Geosyntec</i>
4:30 PM	Closing Remarks		
4:40 PM	Break - Hotel Check-in - (Shuttle back to RAM from hotels available at 5:00 pm)		
5:30 PM	Dinner - Sponsored by		
6:30 PM	<i>EGLE RRD Geological Services Section - Sonic Geoprobe Rig, Sampling Equipment, and More</i>		
8:00 PM - 12:00 AM	Social Event - Music & Karaoke - Bonfires & Open Bar Sponsor(s) - Shuttle Transportation to and from Hotels in Houghton Lake		

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WEDNESDAY - JUNE 15, 2022 - Continued

7:15 AM	Breakfast - Sponsored by		
	Session A Remediation	Session B Tools & Technology	SHORT COURSE
8:00 AM	Morning Coffee & Networking		
9:00 AM	<i>In-Situ Treatment of PFAS in Groundwater</i> Dave Wardwell - Dune Technologies Rich Spehar - BLDI Chris Nelson - eMinus	<i>Implementation of Low-Cost Continuous Real-Time Well and Surface Water Monitoring Stations</i> Greg Cutrell - LimnoTech	<i>Short Course: 9:00 - 11:00 pm Geological Data Visualization Hands-On Short Course Using RockWorks Software</i> Jim Reed - RockWare Inc
9:40 AM	<i>Case Study for the Injection of BOS 200+ to Remediate Saturated Zone LNAPL at the Former Marshall Iron & Metal Site, Marshall, Michigan</i> Gary Simpson - AST Environmental	<i>3D Printing Tools and Applications for Environmental Professionals</i> Will Blocher - Geosyntec	<i>Geological Data Visualization Hands-On Short Course Using RockWorks Software</i> Jim Reed - RockWare Inc
10:20 AM	<i>Evaluation and Implementation of ISS-ISCO at a Dry Cleaner Site</i> Joel Parker - Hamp Mathews & Associates	<i>Lessons Learned from Injecting More Than One Hundred Tons of Potassium Persulfate</i> Drew Baird - FRx	<i>Geological Data Visualization Hands-On Short Course Using RockWorks Software</i> Jim Reed - RockWare Inc
11:00 AM	Networking Break - Sponsored by		
	Session A Remediation 1	Session B Tools, Technology & Remediation	Session C Remediation 2
11:20 AM	<i>Treating 1,4-Dioxane with Activated Potassium Persulfate</i> John Valkenberg - Evonik	<i>Characterization of Migration Pathways in a Complex Glacial-Lacustrine Setting for Comingling Groundwater Impacts Originating at a Former Plating Facility</i> Richard Raetz - GRT, Inc. Rex Johnson - GRT, Inc.	<i>CCR Removal and Its Effects on Soil and Groundwater Geochemistry</i> Sarah Holmstrom - TRC Companies Darby Litz - TRC Companies
12:00 PM	Lunch - Sponsored by		
1:00 PM	<i>Combining Biotic and Abiotic Enhanced Reduction Approaches to Optimize the Remediation of Chlorinated Solvents Source Area</i> Michael Apgar - Fishbeck	<i>Designing a Low-Flow Groundwater Extraction Well and Performance Monitoring System to Address Offsite Migration in a Complex Bluffline/Floodplain Environment</i> Joyce Dunkin, PG, CPG - LimnoTech	<i>Application of In-Situ Chemical Oxidation Combined with In-Situ Stabilization for the Treatment of Chlorinated Solvents and Hydrocarbons</i> Brian Lowes - CTI Associates
1:40 PM	<i>Treatment of a Chlorinated Groundwater Plume Using Iron Impregnated Carbon</i> Agnes Taylor, LPG - SME Jeff Lanier - SME Mary Miller - EGLE RRD	<i>Systematic Remedy Implementation to Mitigate PFAS Discharges</i> Andrew Lorenz - Arcadis Jackie Saling, PE - Arcadis	<i>PFOS and PFOA Remediation Using High Temperature In-situ Thermal Technology; A Design Perspective.</i> Bruce C W McGhee, PhD
2:20 PM	Networking Break - Sponsored by		
3:00 PM	<i>EGLE's Strategy for Prioritization and Addressing Unacceptable Risks at 79 Petroleum Sites</i> Sam Baushke - Geosyntec Elaine Pelc - EGLE RRD		
3:40 PM	Closing Remarks & Raffle Drawing		